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From: Piro, Peter (DPH)
Sent: Saturday, January 29, 2011 7:30 AM
To: Nassif, Julianne (DPH)
Subject: FW: GHB update

Could we live without an internal standard as long as we run the 23 mg/L standard on every run and run both the standard and sample in replicates?

From: Piro, Peter (DPH)
Sent: Friday, January 28, 2011 10:14 AM
To: Salemi, Charles (DPH); Lawler, Michael (DPH)
Cc: Nassif, Julianne (DPH)
Subject: GHB update

I derivatized GHB in varying concentrations (1-23 ppm) to simulate naturally occurring levels in wine. Using the normal 35:1 split, only the highest level integrated, meeting the 100,000 area count requirement. Lower concentrations did not integrate but were chromatographically visible, exceeding acquisition threshold requirement. Using an 80:1 split, the area count of the 1 mg/mL standard was reduced to slightly under 3 million. None of the dilutions integrated but all were still visible. BSTFA did successfully derivatize sugary liquids but the GHB response was noticeably reduced, hence, my concern for excessively altering the split ratio. We may have to consider using an internal standard to factor in run to run variations from tuning, injector suitability and variable injection volumes.